IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA
Alexandria Division

TECSEC, INC., *Plaintiff,* v. ADOBE SYSTEMS INC., *et al.* *Defendants.*	Civil Action No. 1:10-cv-115 Hon. Liam O'Grady Hon. Theresa Buchanan

MEMORANDUM OPINION AND ORDER

This matter is before the Court on Defendant Adobe Systems Inc.'s motion for the construction of 14 disputed patent claim terms and a declaration of indefiniteness of two claim terms, all encompassed in a family of related patents with substantially similar specification. Specifically, Adobe seeks construction of claims 1, 4, 8, and 9 of U.S. Patent No. 5,369,702 ('702); claim 1 of U.S. Patent No. 5,680,452 ('452); claim 1 of U.S. Patent No. 5,717,755 ('755); and claims 1, 3, 14, and 15 of U.S. Patent No. 5,898,781 ('781). The parties fully briefed the matter and the Court held a *Markman* hearing on October 27, 2017.

I. PROCEDURAL HISTORY[1]

Plaintiff TecSec, Inc. accuses the Defendant of infringing on four of Plaintiff's related patents: U.S. Patent Nos. 5,369,702 (the "'702 Patent"); 5,680,452 (the "'452 Patent"); 5,717,755 (the "'755 Patent"); and 5,898,781 (the "'781 Patent") (collectively, the "DCOM Patents"). The DCOM Patents articulate a multi-level encryption method and system that allows

[1] The history of this case is well known to the parties and well-articulated in the prior decisions of the Court and the Federal Circuit Court of Appeals. *See, e.g., TecSec, Inc. v. Adobe Sys. Inc.*, 658 F. App'x 570, 572-75 (Fed. Cir. 2016) ("*TecSec II*"). Accordingly, the Court limits its background to the issue presented in the present Motion.

encrypted files to be nested within other encrypted files. *See* Dkt. No. 869, Exh. 1 ("'702 Patent") at 4:25-28. "In addition to multi-level encryption, the DCOM Patents further limit access by using labels in the form of a field of characters attached to the encrypted files." Dkt. No. 869, at 11.

The matter has been extensively litigated before this Court and the Court of Appeals for the Federal Circuit. Through these appeals, many of the claims in the representative patents have been construed. In 2013, the Federal Circuit Court of Appeals construed a number of the terms in the context of a 35 U.S.C. § 112 challenge. *TecSec, Inc. v. Int'l Bus. Mach. Corp.*, 731 F.3d 1336 (2013) ("*TecSec I*"). The Federal Circuit construed the terms "multi-level multimedia security", "system memory means", "digital logic means", as well as other "means-plus-function" terms. *Id.* at 1344-1350. With respect to the "means" terms, the Federal Circuit found that § 112 was not implicated because the "[t]he defendants have failed to show by clear and convincing evidence that the # 702 Patent specification fails to disclose corresponding structure for the fourteen computer-implemented means-plus-function limitations." *Id.* at 1349. Rather, the "specification disclose[d] the specific software products and how to use those products to implement the claimed functions[.]" *Id.* Rejecting the notion that the examples amounted to "black box" software disclosures, the Federal Circuit found that "the examples here provide detailed prose that shows how the specific software products operate to implement the claimed functions." *Id.*

In 2016, the Federal Circuit construed a number of additional terms in the representative patents in an appeal from the district court's grant of summary judgment on non-infringement. *TecSec, Inc. v. Adobe Systems Inc.*, 658 Fed. App'x 570 (2016) ("*TecSec II*"). The Federal

Circuit construed terms for "selecting a label", "label", and "object-oriented key manager".[2] The Federal Circuit determined that "'selecting a label for the object' in the DCOM patents should be given its plain meaning, without a requirement that the label exist prior to being selected." *Id.* at 578. The Federal Circuit construed the word "label" consistent with the express definition of that term set forth in the specification of the '702 Patent. *Id.* at 579. Further, the Federal Circuit found that "[t]he district court's construction of 'label,' with which we agree, is broad enough to encompass a label which identifies different classes or groups of users authorized to access the object." *Id.* at 580.

The Federal Circuit also "construe[d] the term 'object-oriented key manager' to mean 'a software component that manages the encryption of an object by performing one or more of the functions of generating, distributing, changing, replacing, storing, checking on, and destroying cryptographic keys.'" *Id.* at 582. The Federal Circuit rejected Adobe's argument that it did not infringe the "object-oriented key manager." *Id.* The court found that it could not "conclude as a matter of law that Adobe is entitled to summary judgment of non-infringement" because "Adobe's Acrobat products include a security handler in the form of a software module which implements various aspects of the encryption process and controls access to the contents of encrypted documents." *Id.*

The following are a list of claim terms and prior constructions relevant to the instant motion:

Claim Terms	Prior Construction
"multi-level multimedia security"	"security achieved when encrypted objects are nested within other objects which are also encrypted, possibly within other objects, resulting in multiple layers of encryption."
"object-oriented key manager"	"a software component that manages the encryption of

[2] The Federal Circuit did not disturb the district court's construction of "object", "access authorization", "labelling", or "display header".

	an object by performing one or more of the functions of generating, distributing, changing, replacing, storing, checking on, and destroying cryptographic keys.
"object"	"Any distinct, separate entity"
"access authorization"	"authorization to access an object"
"label"	"a series of letters or numbers, separate from but associated with the sending of an object, which identified the person, location, equipment, and/or organization which is permitted to receive the associated object" and "broad enough to encompass a label which identifies different classes or groups of users authorized to access the object"
"labelling"	"attaching a label"
"display header"	"a header for making visually perceptible to a user"
"selecting a label"	"given its plain meaning, without a requirement that the label exist prior to being selected"

To this prior construction, the instant motion seeks to add claim construction for the following terms and claims:

1) "multi-level multimedia security";

2) the steps of method claims;

3) "object-oriented";

4) "determining access authorization based on the object label" / "determining access authorization based on the first object label";

5) "limiting object access, subject to label conditions" / "limiting object access, according to the label conditions" / "limits access to an encrypted object" / "limits access to the encrypted object";

6) "decrypting the object if access authorization is granted" / "decrypting the first object if access authorization is granted";

7) "allowing access to the first object only if access authorization is granted";

8) "working in conjunction with";

9) "labelling comprises creating a display header";

10) "header array";

11) "accessing an object-oriented key manager" / "selecting an object to encrypt" / "selecting a label for the object" / "selecting an encryption algorithm";

12) "means for embedding a first object within a second object";

13) "digital logic" / "logic" / "logic means", "electronically connected", "accepts inputs" / "disposed to accept inputs from"; and

14) "encryption algorithm module" / "object labelling subsystem" / "decryption algorithm module" / "object label identification subsystem".

Based on the latter proposed construction, Adobe also seeks to have "data processor" in '781 claim 15 declared indefinite for lack of antecedent basis and, if the Court does not so declare, seeks to have the term "embedding logic" in that claim constructed as a means-plus-function term.

II. LEGAL STANDARD

A typical infringement suit has two steps: construing the patent and then determining whether infringement occurred. *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 384 (1996). "The first is a question of law, to be determined by the court, construing the letters-patent, and the description of the invention and specification of a claim annexed to them. The second is a question of fact, to be submitted to a jury." *Id.* (quoting *Winans v. Denmead*, 56 U.S. 330, 338 (1853)). Therefore, in the context of patent law, "[t]he claim define[s] the scope of a patent grant" and under *Markman*, the court, rather than the jury, is to determine the meaning of the disputed terms in a given claim. *Id.* at 373. Once the meaning of the terms has been established, the factual question of infringement is then submitted to a jury. *Id.*

The Federal Circuit's *en banc* decision in *Phillips v. AWH Corp.* remains the guiding light for district courts engaging in the exercise of claim construction. 415 F.3d 1303, 1309

(Fed. Cir. 2005). To begin, *Phillips* reiterates that the patent's claims define the patentee's right to exclude, and "the words of a claim 'are generally given their ordinary and customary meaning.'" *Id.* at 1313 (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)). In some cases, the ordinary meaning may be readily apparent to lay judges, in which case the Court may construe terms by applying the basic meaning of commonly-understood words. *Id.* at 1314.

In general, however, the "ordinary and customary meaning" is "the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention." *Id.* A person of ordinary skill in the art is presumed to read the claim term in the context of the entire patent. *Id.* Thus, the patent specification and the patent prosecution history both provide a useful tool for construing the precise meaning of patent terms. *Id.* (citing *Multiform Desiccants, Inc. v. Medzam, Ltd.*, 133 F.3d 1473, 1477 (Fed. Cir. 1988)). Accordingly, there are three primary sources that should first be consulted in a claim construction inquiry: (1) the claims; (2) the specification; and (3) the prosecution history. *See id.* In certain circumstances, courts may also look to external sources such as dictionaries and treatises to guide their inquiry. *Id.*

Although claim language is the analytical starting point, it "must be read in view of the specification, of which they are a part." *Phillips*, 415 F.3d at 1315 (internal citations and quotation marks omitted). "The specification is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term." *Vitronics*, 90 F. 3d at 979. Therefore, "a claim interpretation that excludes a preferred embodiment from the scope of the claim is rarely, if ever, correct." *On-Line Tech. v. Bodenseewerk Perkin-Elmer*, 386 F.3d 1133, 1138 (Fed. Cir. 2004) (internal citations and quotation marks omitted). On the other hand, courts should not stretch the specification too far,

and should be wary of not reading the specification into the claim as a limitation. *See Phillips*, 415 F.3d at 1315; *see also Hill-Rom Servs., Inc. v. Stryker Corp.*, 755 F.3d 1367, 1371 (Fed. Cir. 2014) ("While we read claims in view of the specification, of which they are a part, we do not read limitations from the embodiments in the specification into the claims.").

In addition to the claims and the specification, the Court must consider the prosecution history, which consists of the complete record of the proceedings before the United States Patent and Trademark Office ("USPTO"). *Phillips*, 415 F.3d at 1317. Because the prosecution history reflects ongoing negotiation between the USPTO and the patent applicant, however, its precise import is not always clear. *See Trading Tech. Int'l, Inc. v. eSpeed, Inc.*, 595 F.3d 1340, 1352 (Fed. Cir. 2010). Nonetheless, when a patent applicant has clearly and unambiguously disclaimed a given construction of a term in the patent prosecution process, she may not turn around and argue for that construction at a later stage. *Omega Eng'g, Inc, v. Raytek Corp.*, 334 F.3d 1314, 1326 (Fed. Cir. 2003). Whether by reference to the specification or the prosecution history, "the standard for disavowal is exacting, requiring clear and unequivocal evidence that the claimed invention includes or does not include a particular feature." *Poly-Am., L.P. v. API Indus., Inc.*, 839 F.3d 1131, 1136 (Fed. Cir. 2016). As the Federal Circuit has recently held, the doctrine of claim disavowal extends to statements made during the *inter partes* review of a patent. *Aylus Networks, Inc. v. Apple Inc.*, 856 F.3d 1353, 1361 (Fed. Cir. 2017).

In addition to legal principles governing claim construction, the instant motion implicates the broader principles of the mandate rule and the law of the case doctrine. Under the law of the case doctrine, it is well established that once a court has decided upon a rule of law, the decision governs through the pendency of the same case. *Banks v. United States*, 741 F.3d 1268, 1276 (Fed. Cir. 2014). The doctrine controls unless a subsequent trial produces substantially different

evidence, controlling authority necessitates abrogation of the decision, or the prior decision was clearly erroneous and would work a manifest injustice. *United States v. Aramony*, 166 F.3d 655, 661 (4th Cir. 1999). Broader than the law of the case doctrine, the mandate rule compels an inferior court to adhere to controlling decisions by a superior court. *Cardiac Pacemakers v. St. Jude Med., Inc.*, 576 F.3d 1348, 1356 (Fed. Cir. 2009).

III. CLAIM CONSTRUCTION

A. "Multi-level multimedia security" ('702 claims 1 and 8, '452 claim 1, '755 claim 1, '781 claims 1 and 14)

Adobe seeks to draw additional language from the patent specification to modify the Federal Circuit's prior construction and construe this term as "encrypted objects are compartmented by label attributes and nested within other objects which are also encrypted, possibly within other objects, resulting in multiple layers of encryption and access control." Adobe Br. at 5-8. TecSec's position is that no further construction is needed. Id. The Court finds the terms sufficiently defined and, based on the law of the case doctrine and the mandate rule, declines to modify the construction by the Federal Circuit. Adobe has not demonstrated that any further construction of the claim term is warranted.

Final Construction: No modification to prior construction.

B. Steps of Method claims ('702 claims 1, 3, and 4; '755 claim 1; '781 claims 1 and 3; '452 claim 1)

Adobe proposes that the Steps of Method claims in the four patents be rewritten from how they appear in the patent specifications, inserting parts of other specifications into the Steps of Method claims and requiring that the steps be rigidly ordered as listed. Adobe Br. at 9. The Court finds that Adobe's proposed construction takes the plain Steps of Method claims and

attempts to modify them in a way inconsistent with the plain language of the specification. Not only is this unsupported by the intrinsic evidence, it would only serve to complicate the claims for a jury. The steps are plainly and consistently stated across the patents at issue. The Court also finds a lack of intrinsic and extrinsic evidence supporting Adobe's assertion that the Steps of Method Claims be rigidly ordered as drafted.

Final Construction: No construction warranted.

C. "Object-oriented" ('702 claim 1; '452 claim 1; '755 claim 1; ' 781 claim 1)

Despite the Federal Circuit's previous construction of "object-oriented key manager," in the instant motion, Adobe seeks to have "object-oriented" interpreted. Adobe Br. at 11. As TecSec points out, however, "object-oriented" does not appear in any of the specifications outside of the phrase "object-oriented key manager." Based on the law of the case doctrine and the mandate rule, the Court declines to modify the current construction. The Court finds that the existing construction of "object-oriented key manager" is sufficient.

Final Construction: Plain and ordinary meaning in light of prior constructions.

D. "Determining access authorization based on the object label" / "determining access authorization based on the first object label" ('702 claim 1; '452 claim 1; '755 claim 1; '781 claim 1); "limiting object access, subject to label conditions" / "limiting object access, according to the label conditions" / "limits access to an encrypted object" / "limits access to the encrypted object" ('702 claim 8; '781 claim 14)

This Court has previously interpreted "access authorization" and "object," and those interpretations were left undisturbed by the Federal Circuit on appeal. *See supra*, n. 2. The Federal Circuit has issued a claim construction for "label." Adobe now asks the Court to interpret the terms in the above contexts to mean "determining if a user has access to an object based on information in the object label, and not based on the user's ability to decrypt the object" and "limiting a user's access to an object based on information in the object label, and not based on

the user's ability to decrypt the object." Adobe Br. at 19-22. Adobe is attempting to add a "user" limitation where none exists. The plain language of the claims does not limit "access authorization" to a "user." Rather, the claims are broad enough to not necessarily limit access to particular users. *See TecSec*, 658 F. App'x at 580. As for the other proposed changes, Adobe does not demonstrate an adequate basis for departing from the plain and ordinary meaning of the terms, particular where several of the key terms have already be construed in this case and are now the law of the case.

Final Construction: Plain and ordinary meaning in light of prior constructions.

E. "Decrypting the object if access authorization is granted" / "decrypting the first object if access authorization is granted" ('702 claim 1; '452 claim 1); "allowing access to the first object only if access authorization is granted" ('755 claim 1; '781 claim 1)

This Court has previously interpreted "access authorization" and "object." Adobe seeks to interpret those terms further in the above context to mean "after determining access authorization, decrypting the object if the user has been granted access" and "after determining access authorization, permitting the user to access the object in order to decrypt." Adobe Br. at 17. Again, as noted *supra*, the imposition of a "user" limitation is unwarranted. The Court finds that the terms are already adequately defined and that no further claim construction on this issue is necessary.

Final Construction: Plain and ordinary meaning in light of prior constructions.

F. "Working in conjunction with" ('702 claim 8)

Adobe seeks to have this term defined as "working simultaneously together with," arguing that "in conjunction" incorporates a co-temporal element. Adobe Br. at 17. In citing to extrinsic evidence for the proposition, Adobe draws on *The American Heritage Dictionary* (2d. College Ed., 1991) definition of "conjunction" – "[a] simultaneous occurrence in space or time; concurrence." *Id.* However, as TecSec points out, that dictionary definition is the second listed for "conjunction;"

the first definition is "a. [t]he act of joining. b. [t]he state of being joined." TecSec Br. at 16-17. This definition does not contain a co-temporal element. The Court finds that narrowing the definition of "conjunction" would be inappropriate. Accordingly, the Court finds that the plain, ordinary meaning of "working in conjunction with" is sufficient.

Final Construction: Plain and ordinary meaning.

G. "Labelling comprises creating a display header" ('755 claim 1)

Adobe seeks to have this term defined as "creating a segment at the beginning of an object containing information for handling the object." Adobe Br. at 18. As discussed *supra*, this Court has already construed "labelling" and the Federal Circuit left that construction undisturbed on appeal. Additionally, the Federal Circuit has construed "display header" and that construction is now the law of the case. The Court finds that additional claim construction on this term is unnecessary in light of prior construction of half of the words in the term. Adobe's proposed construction would inject unsupported limitations into the claim and would only lead to greater jury confusion.

Final Construction: Plain and ordinary meaning in light of prior constructions.

H. "Header array" ('452 claim 1)

Adobe seeks to construe this term as "an ordered list at the beginning of a document showing all objects to which a user has access, including container objects and objects embedded in those container objects." Adobe Br. at 19. Key elements of the proposed construction include interpreting it as an "ordered list," a list "to which a *user* has access," and that appears "at the beginning of a document." Importantly, the language of the claim demonstrates that a "header array" displays the "label," a term already construed in this case to be able to identify classes or groups of users authorized to access objects. *See* Dkt. No. 772, at 26. Nothing in this

construction would suggest that a header array must be an "ordered list." Additionally, as the Court is declining to impose a "user" limitation on other terms in the specification upon which the header array relies, it would be inappropriate to construe such a limitation in the instant term. Finally, while the term "header" would normally suggest something that appears at the top or beginning, header arrays are not limited in the specification to documents. Where applied to an object, which has no top or beginning, the limitation Adobe seeks would be inapplicable. Accordingly, the Court finds that the intrinsic evidence in the specification, as well as the interests of clarity, weigh in favor of a plain ordinary meaning construction of this term.

Final Construction: Plain and ordinary meaning in light of prior constructions.

I. "Accessing an object-oriented key manager" / "selecting an object to encrypt" / "selecting a label for the object" / "selecting an encryption algorithm" ('702 claims 1 and 4; '755 claim 1; '781 claim 1; '452 patent claim 1)

As addressed *supra*, the Federal Circuit has already construed "object-oriented key manager," "label," and "selecting a label". This Court has previously construed "object" and the Federal Circuit left that construction undisturbed on appeal. Those constructions are now the law of the case. To these prior constructions, Adobe seeks further construction in context, seeking to impose a limitation requiring that the captioned functions be "performed by the user." *See* Adobe Br. at 20. This is a common undercurrent throughout the instant motion. For the reasons cited *supra*, the Court declines to construe such a limitation.

Final Construction: Plain and ordinary meaning in light of prior constructions.

J. "Means for embedding a first object within a second object" ('702 claim 9)

This term represents a means-plus-function limitation. The parties agree that the claimed function is "embedding a first object within a second object." Adobe Br. at 22. The corresponding structure in the written description of the patent is defined in the specification as

"a standard application 6 that has the capability to embed an object in a container object, such as Microsoft Object Package for Windows." '702 patent, 5:34-37. TecSec proposes the structure be construed as "an application that has the capability to embed an object in a container object, and equivalents thereof," while Adobe proposes "Standard application 6, such as Microsoft's Object Package for Windows, as described in Fig. 1 and 5:34-41." Adobe Br. at 22. The Court finds that TecSec's proposed construction is proper. *See Watts v. XL Sys.*, 232 F.3d 877, 881 (Fed. Cir. 2000).

Final Construction: Function: embedding a first object within a second object. Structure: an application that has the capability to embed an object in a container object, and equivalents thereof.

K. "Digital logic" / "logic" / "logic means"; "electronically connected"; "accepts inputs" / "disposed to accept inputs from" ('702 claims 8 and 9; '781 claim 14)

The Federal Circuit has already construed "digital logic means." To this construction, Adobe seeks to have this Court declare that the claims cover only hardware and do not cover software-based implementation. Adobe Br. at 24-25. The Court finds the proposed additional construction unsupported by the plain terms of the specification. The Federal Circuit has explicitly recognized software-based implementations of the specification. *TecSec,* 731 F.3d at 1349. Additionally, the prosecution history of the patent demonstrates that the applicant added system claims to make clear that the claims were not "purely software," which does not constitute an admission that the claims were purely hardware. TecSec Br. at 25. Accordingly, the Court declines to limit application of the claims to hardware.

Final Construction: Plain and ordinary meaning in light of prior constructions.

L. "Encryption algorithm module" / "object labelling subsystem" / "decryption algorithm module" / "object label identification subsystem" ('702 claim 8; '781 claim 14)

Adobe moves to have these claims declared indefinite, premised on the previous argument that '702 claim 8 and '781 claim 14 both cover only hardware implementation of the specification. *See* Adobe Br. at 27. The Federal Circuit has previously ruled that the terms "module" and "subsystem" in these claims are not "so devoid of structure as to implicate §112 ¶ 6." *TecSec*, 731 F.3d at 1348. Adobe does not provide this Court with cause or authority to modify the Federal Circuit's findings. Accordingly, for good cause shown, the Court adopts TecSec's proposed construction.

Final Construction: Plain and ordinary meaning in light of prior constructions.

M. "Data processor" ('781 claim 15)

Lastly, Adobe moves to have this term declared indefinite for a lack of antecedent basis. Claim 15 of '781 patent reads, "[t]he system of claim 14, wherein the data processor further comprises embedding logic for embedding a first object within a second object." Adobe Br. at 29-30. Adobe correctly notes that claim 14 does not contain the language "data processor." *Id.* However, the Court finds that the use of the term "data processor," a term of art, is sufficiently clear and unambiguous and would be understood by one skilled in the art. As TecSec notes, an overall read of Claim 14 describes a data processor, while not referring to it as such. TecSec Br. at 30. Claim 15 refers back to that overall description. Accordingly, and for good cause, the Court finds that the term is not indefinite.

As a secondary argument, Adobe seeks to have the term "embedding logic" given means-plus-function treatment. Adobe Br. at 23 n. 6. Adobe has presented no evidence on this point to overcome the presumption that, in the absence of the term "means," § 112, ¶ 6 does not apply. *See Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1349 (Fed. Cir. 2015).

Final Construction: Plain and ordinary meaning.

V. CONCLUSION

For the reasons set forth above, the Court hereby **ISSUES** this Memorandum Opinion and Order as the construction of the disputed claim terms in the '452 patent, the '702 patent, the '755 patent, and the '781 patent.

It is **SO ORDERED**.

Liam O'Grady
United States District Judge

December 21, 2017
Alexandria, Virginia